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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,411	02/18/2004	Alfredo Li Preti	60,137-245	3061

26096 7590 03/27/2006

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EXAMINER
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LUK, EMMANUEL S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/781,411		LI PRETI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Emmanuel S. Luk		1722	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Schluter (3975128).

Schluter teaches a mold valve chamber (20) having an output port (17) on the first axis (Fig. 1) with a mold valve piston (16) and air introduction system (25,34), an injection chamber (1) on a second axis (Fig. 1), an injection piston (3) that is movable in the injection chamber (A), and defines a portion of the mold valve chamber inner perimeter (Figures 2 through 4).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1722

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 3-5, 10, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schluter (3975128) in view of Takizawa et al (5770245).

Schluter fails to teach the piston configuration.

Takizawa teaches a piston (32) having seal rings (31). These are equivalent to the nonmetallic portion being between metallic portions, either from one portion or two separate portions. The seal ring will provide an 'interference fit' within the inner perimeter of the chamber.

It would have been obvious one of ordinary skill in the art to modify Schluter with the nonmetallic portion between two metallic portions as taught by Takizawa because it provides a seal for the valve within the chamber.

In regards to claims 10, 15, and 17, the claims do not teach a structural limitation and merely states the air injection system communicating in response to a position of a mold valve piston. The limitation provided is akin to a process of using the apparatus in response to a condition and provides no structural limitation.

In regards to 4 and 5, Schluter shows a mold valve piston in the extended position (Fig. 1), the passage of the air inlet is blocked by the mold valve piston. Thereby, Schluter teaches a mold valve piston that is selectively movable to block the air inlet.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-10 and 15-17 have been considered but are moot in view of the new ground(s) of rejection. Examiner was recently made aware of the Schluter reference that teaches the claimed invention with the mold valve chamber and injection chamber and clearly showing an air injection system via the blower (25) that is connected to the mold valve chamber. Claim 4 does not provide distinction in the valve being selectively movable to block the air inlet over Schluter.

In regards to arguments concerning the use of Takizawa, Examiner disagrees with the applicant's arguments since the seal rings can provide an improved fit of the piston with the chamber. This will prevent any material from flowing back especially in the case of wear or due to deformities of the either parts either from manufacturing or from the course of operation. It would be obvious to one of ordinary skill in the art to incorporate this feature into Schluter for the mold valve chamber.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bellasalma (6997690).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571)

Art Unit: 1722

272-1134. The examiner can normally be reached on Monday-Thursday 8 to 5 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL

DUANE SMITH  
PRIMARY EXAMINER

*D. Smith*  
3-20-06